

#### **CITY OF DURHAM**

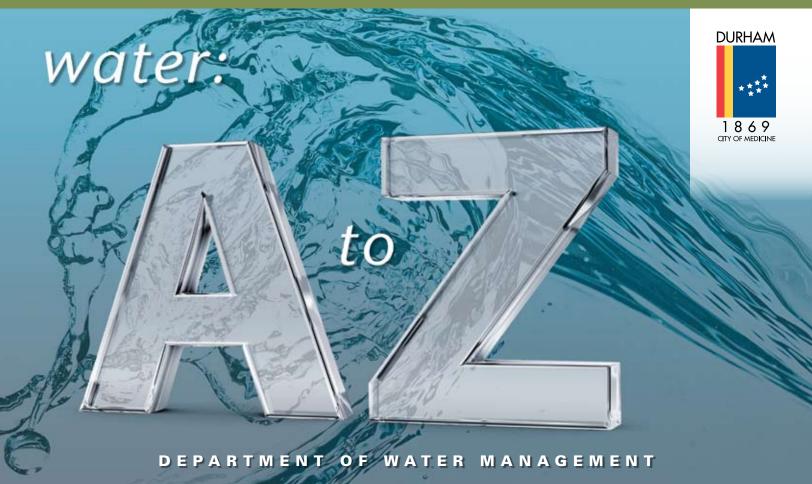
**Department of Water Management** 101 City Hall Plaza Durham, NC 27701

www.DurhamNC.gov



**EN ESPAÑOL** Este folleto tiene información importante acerca de la calidad del agua que provee la Ciudad de Durham. Si necesita más información acerca del contenido de este Folleto, el personal de El Centro Hispano puede ayudarle 201 W. Main Street # 100 Durham NC, 27701, teléfono **919-687-4635**.

# WATER QUALITY REPORT 2011



#### **Dear Durham Water Customers,**



Before you delve into the water quality information provided in this year's annual report, I wanted to thank you – our customers – for the positive satisfaction rating given for the quality of water in the 2011 City of Durham Customer Satisfaction Survey. Department of Water Management employees take a great deal of pride in providing high quality services to our customers and we want to continue to improve. During this last year, we have completed a number of large and small projects to improve the quality and/or reliability of the City's drinking water. These projects make up more than 50% of the department's Capital Improvement Program (CIP) which is funded by you – our ratepayers. Below are highlighted a few of the improvement projects completed in 2011:

- Mud valves at the Williams WTP were replaced for more efficient residuals removal from sedimentation tanks, resulting in significantly reduced process down time and increased staff productivity.
- New Finished Water Pump (FWP) drives were installed at the Brown WTP providing greater operational flexibility and reliability.
- The Brown WTP filters 1- 4 were rebuilt and upgraded to a new operational mode and improvements were made to the residuals handling system.

We continue to move forward with upgrades and expansions at our water treatment facilities to address process improvements. While many improvements are driven by regulatory requirements, the renewal and rehabilitation projects are necessary to improve and enhance the reliability of our water delivery system. Distribution system projects completed during the year include the Southern Reinforcing Main – Phase 1 and the Hillandale Dual Water Line - Phase 1. More information on these and other CIP projects can be found on the City's website. The City is also in the construction phase of a new 3.0 MG elevated storage tank in southeast Durham which will improve the reliability and system pressure in this portion of the service area.

Moving forward, we anticipate increased efficiencies in meter reading and billing as more electronic meters are installed. Already two districts have been converted to monthly billing with two of the four AMR project phases completed. While these efficiencies and improvements require modest rate increases, we pledge to do our best to keep our water rates affordable for all. Not only is drinking tap water good for your health, it is more cost effective and better for the environment than bottled water. For more information on tap water's affordability and carbon footprint, visit www.drinktap.org.

Best regards,

Don Greeley

Director, Department of Water Management



is for **AMR – Automated Meter Reading** project. Phases 1 and 2 of the AMR project have been completed; approximately one-half of the system's 80,000 meters have been replaced with electronically read meters. Stay tuned as the City moves to monthly billing for all accounts, district by district as more portions of the system are converted to AMR technology.

#### **Questions?**

Questions regarding the information in this report should be directed to Water Management staff at the Brown Water Treatment Plant, 919-560-4362. For information on water conservation or to arrange a tour of facilities, call 919-560-4381. Call 919-560-4411 for all billing questions. For information about City operations and services, contact **Durham One Call** at 919-560-1200.

#### **Notice Under the Americans with Disabilities Act**

Persons who require assistance should call 919-560-4197, TTY 919-560-1200, or e-mail ADA@DurhamNC.gov no later than 48 hours before the event.

#### Aviso bajo el Acto de Americanos Discapacitados

Personas que requieran asistencia deben llamar 919-560-4197, TTY 919-560-1200, o enviar un correo electronico ADA@DurhamNC.gov por lo menos 48 horas antes del evento.



# **Tap Water Compliance History**

In this edition of **water: A to Z**, we are pleased to report that the City of Durham's tap water had zero exceedances of water quality standards and one reporting violation during the 2011 calendar year. The substances which were detected were all below the designated levels allowed by the Environmental Protection Agency (EPA). The City is required to test for more than 150 different constituents in the drinking water and the compounds listed in the tables in this report are just a fraction of the total number of required and voluntary analyses conducted each year. The City received a reporting violation for failure to collect, analyze and submit quarterly results for Volatile Organic Compounds (VOCs) in April and July of 2011. The requisite follow-up sampling has been completed and all constituents within the VOC group are below detection levels. For complete information on this issue, please see the "Notice to the Public" insert on page 6.

#### **Sources of Drinking Water**

The sources of drinking water - both tap and bottled - include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over land or through the ground, minerals and other materials are dissolved naturally. Water can also pick up substances that are the result of animal or human activity. Source water may contain the following:

- microbial contaminants, such as viruses and bacteria:
- inorganic contaminants such as salts and metals;
- pesticides and herbicides from agriculture or urban run-off;
- · organic chemicals from industrial processes or run-off; and
- radioactive contaminants that can be naturally occurring

To ensure that tap water is safe to drink, the EPA regulates the amount of certain substances in your tap water we provide. The Food and Drug Administration establishes limits for contaminants in bottled water to protect public health.

#### **Durham's Drinking Water Sources**

Durham is fortunate to have two high quality surface water sources. Lake Michie, built in 1926, was the City's main water source until the Little River Reservoir was constructed in 1988. Using recent modeling of the reservoirs which takes into account the extreme drought conditions of 2007-08, the City has adjusted the safe yield of the two lakes; with a 20% safety factor, the safe yield value used for future planning purposes is 28.9 MGD.

For that reason, the full utilization of the City's additional water sources become a higher priority. Those additional sources are Jordan Lake and Teer Quarry. In 2002, the City of Durham obtained an allocation of approximately 10 million gallons of water per day from Jordan Lake, another local high quality water source. Currently, Durham accesses this water on an as-needed basis via the Town of Cary's water system. With regional partners, Durham is exploring opportunities to build an additional intake at Jordan Lake. The City also obtained the Teer Quarry for use as off-line water storage. Water stored in the quarry was accessed for emergency purposes during the drought of 2007-08. Permanent facilities to allow for filling the quarry from a number of sources during normal conditions are currently in the design phase.

Water may be transferred from the two supply lakes to the City's two treatment plants by gravity flow, hydropower or electric power. Terminal reservoirs at each water treatment plant holds about a two-to-three day supply of water.

#### How is Durham's water treated?

Durham's two drinking water facilities provided 27 million gallons per day (MGD) to 251,103 people in Durham City and County in 2011. The oldest facility is the Williams Water Treatment Plant on Hillandale Road which was built in 1917. It has been expanded and upgraded a number of times and has a current capacity of 22 MGD. The Brown Water Treatment Plant, on Infinity Road, was built in 1977 and has a current capacity of 30 MGD.

Both plants operate using optimized conventional water treatment processes. The initial treatment step is coagulation which involves the rapid mixing of caustic and ferric sulfate into the raw (untreated source) water. Next, the water flows into chambers where gentle mixing allows particles to stick together or flocculate. The heavy floc particles that have formed then settle and are removed in sedimentation basins. Chlorine is added to the settled water as a disinfectant. The water then flows through sand and anthracite filters to remove any remaining particles. Phosphate and fluoride are then added. In the final step, chlorine and ammonia are combined to form chloramines which serves as the distribution system's residual disinfectant.

The City of Durham has added fluoride to its drinking water since 1957 to promote dental health. Until recently, state regulations required a target concentration of 1.0 mg/l for fluoride. However in 2010, the EPA - in conjunction with the Centers for Disease Control - determined that dental health could still be maintained with lower levels of fluoride. Based on this, NC regulators have allowed water systems to decrease their fluoride target levels to 0.7 mg/l. The City changed dosage levels for fluoride immediately upon receiving approval. Testimony from public health experts supports the continued addition of fluoride to drinking water as an ongoing safeguard for dental health.

# Which is it - Water Conservation, Water Restrictions or Water Efficiency?

For years, the terms have been used synonymously, however on the heels of recent droughts, the distinct differences between these terms are emerging. Water conservation implies that you must "cut back" on how much water is used, either at home or at work and may even seem to involve a level of sacrifice. And, while this has been demonstrated to be an effective tool in reducing water demand in drought and non-drought periods, the drought-provoked behavioral changes may not become permanent.

Water restrictions are mandatory reductions in usage that are invoked during water shortages and typically become increasingly restrictive to achieve significant reductions in water usage/demand. The City's Water Shortage Response Plan spells out the specific triggers for moving in and out of the different stages (four in total) as the water shortage worsens or improves. These are based on supply and demand; when the lakes are full, no restrictions are in effect; when the lake levels start falling during extended hot, dry spells, one can anticipate that restrictions are on the horizon. Restrictions such as the City's year-round **Odd-Even Irrigation Schedule** also promote water efficiency.

Water Efficiency requires a culture change that includes embracing new technologies for water efficient devices - both at home and at work - and adopting green building practices. Rather than feeling deprived by "conserving" water, "water efficiency" encourages thoughtful consideration of water use with the end goal of ensuring adequate potable (drinking) water supplies during both dry and normal times. Practices such as installing rain/moisture sensors on irrigation systems, choosing replacement fixtures (WaterSense®) that are more efficient than those that just meet the code, capturing rain for gardening or other uses and deciding to adopt Xeriscape landscaping principles are all examples of embracing water efficiency. Water efficiency is a lifestyle change that makes WaterSense® and economic sense.

# **Source Water Assessment Program (SWAP) Results**

The NC Department of Environment and Natural Resources (DENR), Public Water Supply Section (PWSS) administers the State's Source Water Assessment Program (SWAP). As such, they conduct periodic assessments of all drinking water sources across North Carolina. The purpose of the assessments is to determine the susceptibility of each drinking water source (well or surface water intake) to potential contaminant sources (PCS). PCSs include activities such as animal operations, septage disposal sites, old landfill sites and underground storage tanks that are located in Durham, Person and Orange counties - the watersheds of Lake Michie and Little River.

The final susceptibility rating for Durham's water sources was determined by combining the contaminant rating and the inherent vulnerability rating. The Contaminant Rating is based on the number and locations of PCSs within the assessment area. Inherent Vulnerability rating refers to the geologic characteristics or existing conditions of the surface water sources and other aspects of the watershed such as watershed classification and development activities. A susceptibility rating of "higher" does not imply a poor water quality - only the systems' potential to become contaminated by identified PCSs in the assessment area. The assessment findings are summarized in the table below.

SWAP RESULTS SUMMARY FOR DURHAM Report updated February 22, 2010			
Source Name	Inherent Vulnerability Rating	Contaminant Rating	Susceptibility Rating
Lake Michie	Lower	Higher	Moderate
Little River Reservoir	Moderate	Higher	Higher

For the full report, visit www.deh.enr.state.nc.us/pws/swap. To obtain a printed copy of the SWAP report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh NC 27699-1634, or emailing a request to swap@ncmail.net. Please indicate the system name (City of Durham), PWSID (03-32-010), and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact DENR's Source Water Assessment staff by phone at 919-715-2633.



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# 2011 CITY OF DURHAM: WATER QUALITY SUMMARY

SUBSTANCE AND UNIT OF MEASUREMENT	MAX. LEVEL DETECTED AND RANGE	VIOLATION YES/NO	MAX. LEVEL ALLOWED (MCL)	IDEAL GOAL (MCLG)	POTENTIAL SOURCE(S) OF SUBSTANCE
regulated at the treatment	PLANTS				
<b>Fluoride</b> mg/L	0.74 (0.57 – 1.10)	NO	4.0	4.0	Naturally occurring mineral; also added to promote dental health
Nitrate mg/L (as Nitrogen)	0.15 (< 0.10 – 0.30)	NO	10.0	10.0	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Turbidity</b> NTU	0.07 (0.02 – 0.19)	NO	π	N/A	Soil runoff
Turbidity, % of monthly samples ≤ 0.3 NTU	100%	NO	95%	100%	
Total Organic Carbon mg/l (TOC) Results show the range of TOC in both source and treated water. Durham's processes remove more than the required 50%.	Average Removal 59% Source 6.03 (4.21 – 8.13) Treated 2.49 (1.23 – 3.26)	NO	NR	TT 50% removal	Naturally present in the environment
Alpha emitters pCi/L (Samples collected & analyzed February 2008)	None detected (no range)	NO	15	0	Erosion of natural deposits
Beta/photon emitters pCi/L (Samples collected & analyzed February 2008)	None detected (no range)	NO	50	0	Decay of natural and man-made deposits
REGULATED AT THE CUSTOMER	'S TAP				
Copper mg/L (EPA required triennial sampling conducted in July – September 2010)	< 0.05 (90th percentile)	NO	AL=1.3	1.3	Corrosion of household plumbing systems None of the targeted 87 sampling sites exceeded the Action Level
Lead mg/L (EPA required triennial sampling conducted in July – September 2010)	< 0.003 (90th percentile)	NO	AL=0.015	0	Corrosion of household plumbing systems None of the targeted 87 sampling sites exceeded the Action Level
regulated in the distribution	on system				
<b>Chloramines</b> mg/L (as Cl <sub>2</sub> )	2.9 RAA (Running Annual Average)	NO	MRDL 4.0	MRDLG 4.0	Water additive to control microbes
<b>Chlorine</b> mg/l	N/A	NO	MRDL 4.0	MRDLG 4.0	Disinfectant to control microbes; annual disinfection process not conducted in 2011
Total Coliform Bacteria (as a percent)	0.2% positive	NO	< 5% positive	0% positive	Naturally present in the environment
Five Haloacetic Acids (5HAA) μg/L	28 – System Average (22 – 37)	NO	60	0	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) μg/L	44.6 – System Average (31 – 59)	NO	80	0	By-product of drinking water disinfection
unregulated substances					
Sodium mg/L	30.4 (25.7 – 36.3)	NO	NR	20 DWEL	Naturally occurring element in soil and water
Sulfate mg/L	48 (40 – 56)	NO	NR	250	Naturally occurring mineral in soil

The City of Durham did not monitor Volatile Organic Compounds for the compliance periods beginning April 1st and July 1st, 2011. Subsequent compliance testing was conducted to correct the problem. See page 6, Notice to Public for details.

The City of Durham (PWSID # 03-32-010) routinely monitors for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that were detected during testing conducted from January 1 through December 31, 2011. The EPA or the State requires water providers to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, while representative of water quality, is more than one year old.

#### **ELEMENTS OF INTEREST**

SUBSTANCE, UNIT OF MEASUREMENT ANNUAL AVERAGE
pH, standard units (range)
Alkalinity, mg/L
Calcium, mg/L
Chloride, mg/L
Conductivity, micromhos/cm
Hardness - Calculated, mg/L
Hardness - EDTA, mg/L
Orthophosphate, mg/L (as phosphorus)
Potassium, mg/L
Total Solids, mg/L
Zinc, mg/L

#### KEY TO ABBREVIATIONS IN TABLE

ma/L	milligrams per liter, or parts per million	

MCL Maximum Contaminant Level; the highest level of a contaminant that is allowed in drinking water

MCLG Maximum Contaminant Level Goal; the level of a contaminant in drinking water below which there is no known or expected risk

MRDL Maximum Residual Disinfectant Level; the highest level of a disinfectant allowed in drinking water

MRDLG Maximum Residual Disinfectant Level Goal; the level of a drinking water disinfectant below which there is no known or expected risk to health

ΑL Action Level; the concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow. Action Levels are reported at the 90th percentile for homes at greatest risk

TT Treatment Technique; a required process intended to reduce the level of a contaminant in drinking water

μg/L micrograms per liter, or parts per billion

pCi/L Picocuries per liter; a measure of the radioactivity in water

NTU Nephelometric Turbidity Units; measures the clarity or cloudiness in water

N/A Not Applicable

NR Not Regulated

Less Than

**DWEL** North Carolina guidance Drinking Water Equivalent Level

**Special Note**: MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a onein-a-million chance of having a potentially adverse health effect.

#### SPECIAL INTEREST INFORMATION

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly citizens and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial organisms are available from the Safe Drinking Water Hotline at (800) 426-4791.

# What is Cryptosporidium?

Cryptosporidium (Crypto) is a microbial parasite that comes from animal wastes and occurs naturally in rivers and lakes throughout the United States. Controlling and minimizing development and animal activities in our watershed reduces the occurrence of Crypto in source water. This microscopic organism is typically effectively removed by the water treatment process combination of filtration, sedimentation and disinfection. However, when ingested, Crypto can cause fever, diarrhea, and other gastrointestinal symptoms. Durham monitored source water for Crypto as a part of the Information Collection Rule in the late 1990s and began monthly monitoring in fall 2006 as a part of the Long Term Two Enhanced Surface Water Treatment Rule (LT2SWTR). Crypto has not been detected in any monitoring events to date; long term, the results of monitoring will determine whether or not additional treatment will be necessary.

#### **Lead and Drinking Water**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Department of Water Management is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available on the EPA's website at www.epa.gov/safewater/ lead, the Safe Drinking Water Hotline or at or the City's website at http://durhamnc.gov/ich/op/dwm/Pages/Lead-in-Drinking-Water.aspx.

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

# The City of Durham Has Not Met Monitoring Requirements

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the compliance period(s) specified in the table below, we did not monitor or test for the contaminants group(s) listed and therefore cannot be sure of the quality of our drinking water during that time.

CONTAMINANT	ENTRY POINT/	COMPLIANCE PERIOD	SAMPLING	WHEN SAMPLES
GROUP**	LOCATION CODE	BEGIN DATE	FREQUENCY	WERE TAKEN
VOLATILE ORGANIC COMPOUNDS	PO1 / EP1	APRIL 1 & JULY 1, 2011	1 PER QUARTER	4th QUARTER 2011

#### What should I do?

There is nothing you need to do at this time. Follow-up sampling has been completed and results indicate that all constituents within the VOC group are below detection levels.

#### What happened? What is being done? When will the problem be corrected?

The City of Durham did not monitor Volatile Organic Compounds for the compliance periods beginning April 1st and July 1st, 2011. The routine sample collected on 2/16/11 reported total Xylenes of 0.00064 mg/l, just above the detection level limit of 0.0005 mg/l (called a "hit"). Current State regulations require additional monitoring when "hits" occur. Once this was determined, subsequent compliance testing was conducted on 12/19/11 and 2/12/12 which noted that all chemicals in the VOC group were below their detection levels. Please note that this is not a violation of a contaminant limit but a monitoring oversight.

Violation Awareness Date: February 2, 2012

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, please contact: Responsible Person: Thomas Harden, Superintendent & ORC Phone: 919-560-4362

System Name & PWSID #: City of Durham - 03-32-010 System Address: 101 City Hall Plaza Durham, NC 27701

VOC - Volatile Organic Chemicals, - VOCs are commonly used in industrial and manufacturing processes. VOCs include p-Isopropyltoluene, Chloromethane, Dichlorodifluoromethane, Bromomethane, Chloroethane, Fluorotrichloromethane, Hexachlorobutadiene, Naphthalene, 1,2,4-Trichlorobenzene, Cis-1,2-Dichloroethylene, Dibromomethane, 1,1-Dichloropropene, 1,3-Dichloropropene, 1,3-Dichloropropene, 1,2,3-Trichloropropene, 2,2-Dichloropropene, 1,3-Dichloropropene, 1,3-Dichloropr 1,2,4-Trimethylbenzene, 1,2,3-Trichlorobenzene, n-Butylbenzene, 1,3,5-Trimethylbenzene, Tert-Butylbenzene, Sec-Butylbenzene, Bromochloromethane, Chloroform, Bromoform, Bromodichloromethane, Chlorodibromomethane, Xylenes (Total), Dichloromethane, o-Chlorotoluene, p-Chlorotoluene, m-Dichlorobenzene, o-Dichlorobenzene, p-Dichlorobenzene, Vinyl Chloride, 1,1,-Dichloroethylene, 1,1-Dichloroethane, Trans-1,2,-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane, Trichloroethylene, 1,1,2-Trichloroethane, 1,1,1,2-Tetrachloride, 1,2-Dichloropropane, Trichloroethylene, 1,1,2-Trichloroethane, 1,1,1,2-Tetrachloride, 1,2-Dichloropropane, Trichloroethylene, 1,1,2-Trichloroethane, 1,1,2-Tetrachloride, 1,2-Dichloropropane, Trichloroethylene, 1,2-Dichloropropane, 1,2-Dichlor Tetrachloroethylene, 1, 1,2,2-Tetrachloroethane, Chlorobenzene, Benzene, Toluene, Ethylbenzene, Bromobenzene, Isopropylbenzene, Styrene, and n-Propylbenzene.

#### **Community Participation**

Do you have an interest in how decisions regarding Durham's water system or other City issues are made? The public is welcome to attend regularly scheduled meetings of Durham's City Council. Council meetings are held the first and third Monday of each month at 7 p.m. City Council members also have regular work sessions to prepare for Council meetings. These sessions occur on Thursdays - two weeks prior to each regular Council meeting. Work sessions are held at 1 p.m. in the Council's Committee Room on the second floor of City Hall. Council meetings are held at City Hall in the Council Chambers on the first floor. Check the City's Web site to confirm meetings at www.DurhamNC.gov. City Hall is located in downtown Durham at 101 City Hall Plaza.

The department has an ongoing public education and outreach program that covers a wide variety of topics, from conservation to water quality to careers in the field. Our program seeks to provide the community with important and timely tips and information about drinking water and to make sure customers understand the significance of the work the Department of Water Management does. Staff participates in a number of city-wide events throughout the year such as the Durham Earth Day Festival and CenterFest, as well as smaller events such as the Parks and Recreation Community Days. Additionally, staff provides presentations and facility tours to groups of many ages. Please visit DurhamSavesWater.org for information about the education and outreach program.

Each year, the Department of Water Management sponsors a water conservation poster contest for local students, grades K through 8. The theme for 2012 was Wasting Water is Weird. Water Management received nearly 400 posters, proving that Durham's students do indeed feel that wasting water is weird! Congratulations to our 2012 winners.

Additional congratulations go to those students (designated by an asterisk) who also won at the statewide Water Conservation poster contest, sponsored by the NC American Water Works -Water Environment Association.

2012 Poster Contest

# **Wasting Water is Weird**

388 entries

#### Grade K-2 Winner

1st Place	Perla Perez Boyzo*	E.K. Powe Elementary School
2nd Place	Alyssa Abbott	Hope Valley Elementary School
3rd Place	Lia Machado Fortes	E.K. Powe Elementary School

#### Grade 3-5 Winners

1st Place	Maggie McGehee Wittma	nn* Durham Academy
2nd Place	Claire Ridley*	Easley Elementary School
3rd Place	Casey Carrow*	Durham Academy

#### Grade 6-8 Winners

1st Place	Yaquili Tolentino*	W.G. Pearson Middle School
2nd Place	Amelia Bryant*	Voyager Academy
3rd Place	Lotus Simonetti-Poe	Voyager Academy
3rd Place	Narayeli Alvarez*	W.G. Pearson Middle School



1st Place Grade K-2 by Perla Perez Boyzo



1st Place Grade 3-5 by Maggie McGehee Wittman



1st Place Grade 6-8 by Yaquili Tolentino



#### **Durham's High Efficiency Toilet (HET) Rebate Program**

The City's Toilet Rebate Program allows residents and businesses with a City of Durham water account to replace their existing toilets with high efficiency, WaterSense certified models. Eligible applicants receive a \$100 credit on their water bill for every qualified toilet replacement. For more information, visit www.DurhamSavesWater.org or call (919) 560-4381.

